

OPTICAL NETWORK WITH SELECTIVE MODE SWITCHING

ABSTRACT OF THE DISCLOSURE

5 A method for communicating optical traffic in a network comprising a plurality of network nodes includes receiving traffic to be added to the network at a network node. The network is operable to communicate received traffic in an optical signal comprising one or more channels. The method also includes determining a data rate and one or more destination nodes of the received traffic and assigning the
10 received traffic to one or more of the channels of the optical signal based on the determined data rate and the destination nodes. The method further includes configuring one or more of the network nodes to process the traffic contained in the assigned channels based on the data rate and the destination nodes of the optical traffic and communicating the traffic through network in the assigned channels of the
15 optical signal based on the determined data rate and the one or more destination nodes.